

A2 is Val or Ala;

A8 is Asn or Ser;

A13 is Val or Ile;

A15 is Ala or Gly;

A18 is Ser or Tyr;

A24 is Gln or His;

A25 is Asp or Glu;

A27 is Met, Ile or Nle;

A28 is Ser or Asn;

A30 is a bond or any amino acid sequence of 1 to 15 residues;

R₀ is NH₂ or NH-(CH₂)**n**-CONH₂, with **n**=1 to 12; and

X is a hydrophobic tail anchored via an amide bond to the N-terminus of the peptide and said hydrophobic tail defining a backbone of 5 to 7 atoms;

wherein said backbone can be substituted by C₁₋₆ alkyl, C₃₋₆ cycloalkyl, or C₆₋₁₂ aryl,

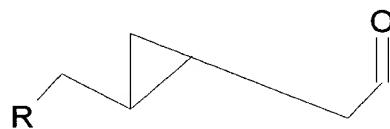
and said backbone comprises at least one rigidifying moiety connected to at least two atoms of the backbone;

said moiety is selected from the group consisting of triple bond, saturated or unsaturated C₃₋₉ cycloalkyl, and C₆₋₁₂ aryl.

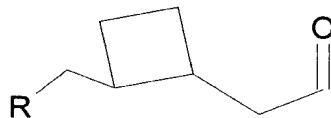
2. (Amended) The hydrophobic GRF analog of claim 1, wherein X is selected from the group consisting of:



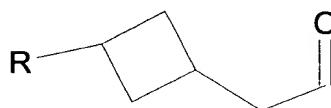
1 (R = H or CH₃ or CH₂CH₃);



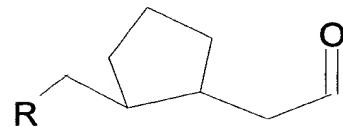
2 (R = H or CH₃ or CH₂CH₃);



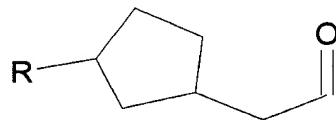
3 (R = H or CH₃ or CH₂CH₃);



4 (R = H or CH₃ or CH₂CH₃);

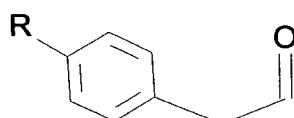
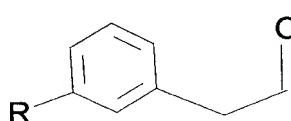
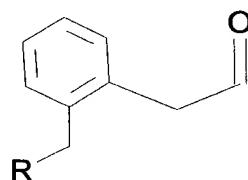
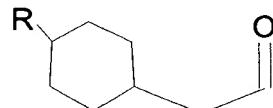
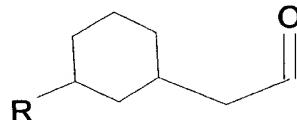
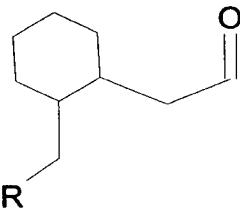


5 (R = H or CH₃ or CH₂CH₃);

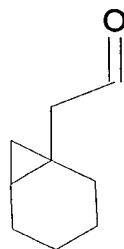


6 (R = H or CH₃ or CH₂CH₃);

A'
cont



A
1
cont



Al
com

13

II 4. (Amended) A method for increasing the level of growth hormone in a patient, the method comprising administering to said patient an effective amount of a GRF analog as claimed in claim 1.

III 5. (Amended) A method for the diagnosis of growth hormone deficiency in a patient, the method comprising administering to said patient an effective amount of a GRF analog as claimed in claim 1 and measuring growth hormone response.

IV 6. (Amended) A method for the treatment of pituitary drawfism or growth retardation in a patient, the method comprising administering to said patient an effective amount of a GRF analog as claimed in claim 1.

V 7. (Amended) A method for the treatment of wound or bone healing in a patient, the method comprising administering to said patient an effective amount of a GRF analog as claimed in claim 1.

VI 8. (Amended) A method for the treatment of osteoporosis in a patient, the method comprising administering to said patient an effective amount of a GRF analog as claimed in claim 1.

VII 9. (Amended) A method for improving protein anabolism in a human or an animal, the method comprising administering to said human or animal an effective amount of a GRF analog as claimed in claim 1.

10 10. (Amended) A method for inducing a lipolytic effect in a human or an animal inflicted with clinical obesity, the method comprising administering to the human or animal an effective amount of a GRF analog as claimed in claim 1.

11 11. (Amended) A method for the overall upgrading of somatroph function in human or animal, the method comprising administering to said patient an effective amount of a GRF analog as claimed in claim 1.

*(NE)
must be in
added form*

(Applicant's Remarks are set forth hereinbelow, starting on the following page.)